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**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q94633

Eiichi KITAZONO, et al.

Appln. No.: 10/577,154

Group Art Unit: Not yet assigned.

Confirmation No.: 1395

Examiner: Not yet assigned.

Filed: April 26, 2006

For: HYALURONIC ACID COMPOUND, HYDROGEL THEREOF AND JOINT TREATING MATERIAL

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 C.F.R. §§ 1.97 and 1.98**

**MAIL STOP AMENDMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

One copy of each of the listed documents is submitted herewith, except for the following: U.S. patents and/or U.S. patent publications; and co-pending non-provisional U.S. applications filed after June 30, 2003. Also, a copy of the International Preliminary Report on Patentability is submitted herewith.

The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date; (2) Before the mailing date of the first Office Action

on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after filing a request for continued examination (RCE) under §1.114, and therefore, no Statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for foreign language documents, Applicant submits the following explanations:

1. The disclosure on pages 1-2 of the present specification and the submission of an English language abstract for JP-A-2001-293081 constitutes a concise statement of relevance of JP-A-2001-293081.
2. The disclosure on page 2 of the present specification and the submission of an English language abstract for JP-A-7-97401 constitutes a concise statement of relevance of JP-A-7-97401.
3. The disclosure on page 2 of the present specification and the submission of an English language abstract for JP-A-60-130601 constitutes a concise statement of relevance of JP-A-60-130601.
4. The disclosure on page 5 of the present specification and the submission of an English language abstract for JP-A-63-123392 constitutes a concise statement of relevance of JP-A-63-123392.
5. The disclosure on page 5 of the present specification and the submission of an English language abstract for JP-A-2-234689 constitutes a concise statement of relevance of JP-A-2-234689.

6. The indication in the International Search Report of the degree of relevance found by the foreign patent office and the submission of an English language abstract for JP-A-6-72893 constitutes a concise statement of relevance of JP-A-6-72893.

7. The indication in the International Search Report of the degree of relevance found by the foreign patent office and the submission of an English language abstract for JP-A-5-236951 constitutes a concise statement of relevance of JP-A-5-236951.

8. The indication in the International Search Report of the degree of relevance found by the foreign patent office and the submission of an English language abstract for JP-A-2000-212204 constitutes a concise statement of relevance of JP-A-2000-212204.

9. The indication in the International Search Report of the degree of relevance found by the foreign patent office and the submission of an English language abstract for JP-A-9-59303 constitutes a concise statement of relevance of JP-A-9-59303.

10. The indication in the International Search Report of the degree of relevance found by the foreign patent office for JP-A-2002-529550 and the submission of corresponding international patent application WO 00/27887 constitutes a concise statement of relevance of JP-A-2002-529550.

11. The indication in the International Search Report of the degree of relevance found by the foreign patent office for JP-A-11-509256 and the submission of corresponding international patent application WO 97/04012 constitutes a concise statement of relevance of JP-A-11-509256.

INFORMATION DISCLOSURE STATEMENT  
U.S. Application No.: 10/577,154

Attorney Docket No. Q94633

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

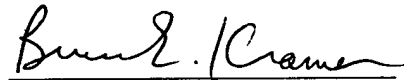
Respectfully submitted,

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WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER



Bruce E. Kramer  
Registration No. 33,725

Date: February 15, 2007

Substitute for Form 1449 A & B/PTO FEB 15 2007 <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)			<i>Complete if Known</i>		
			Application Number	10/577,154	
			Confirmation Number	1395	
			Filing Date	April 26, 2006	
			First Named Inventor	Eiichi KITAZONO	
			Art Unit	Not yet assigned.	
Examiner Name			Not yet assigned.		
Sheet	1	of	2	Attorney Docket Number	Q94633

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code <sup>2</sup> (if known)		
		US 5,939,323		08-17-1999	Valentini et al.
		US 4,582,865		04-15-1986	Balazs et al.
		US 4,605,691		08-12-1986	Balazs et al.
		US 4,937,270		06-26-1990	Hamilton et al.

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)			
		JP	2001-293081	A	10-23-2001	OCHI MITSUO, JAPAN TISSUE ENGINEERING:KK	ABSTRACT
		JP	7-97401	A	04-11-1995	SHISEIDO CO. LTD.	ABSTRACT
		JP	60-130601	A	07-12-1985	BIOMATRIX INC.	ABSTRACT
		JP	63-123392	A	05-27-1988	DENKI KAGAKU KOGYO KK	ABSTRACT
		JP	2-234689	A	09-17-1990	DENKI KAGAKU KOGYO KK	ABSTRACT

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation <sup>6</sup>
		MATS BRITTBORG, M.D., ANDERS LINDAHL, M.D., PH.D., ANDERS NILSSON, M.D., PH.D., CLAES OHLSSON M.D., PH.D., OLLE ISAKSSON, M.D., PH.D., AND LARS PETERSON, M.D., PH.D., Treatment of Deep Cartilage Defects in the Knee with Autologous Chondrocyte Transplantation, The New England Journal of Medicine, October 6, 1994, volume 331, Number 14, pages 889-895	
		SHIGEYUKI WAKITANI, M.D., TATSUHIKO GOTO, M.D., STEPHEN J. PINEDA, M.D., RANDELL G. YOUNG, D.V.M., JOSEPH M. MANSOUR, PH.D., ARNOLD I. CAPLAN, PH.D. AND VICTOR M. GOLDBERG M.D., Mesenchymal Cell-Based Repair of Large, Full-Thickness Defects of Articular Cartilage, The Journal of Bone and Joint Surgery, Incorporated, vol. 76-A, no. 4, April 1994, pages 579-592	
		MITSUO OCHI, YUJI UCHIO, MASATOSHI TOBITA, AND MASAKAZU KURIWAKA, Current Concepts in Tissue Engineering Technique for Repair of Cartilage Defect; Artificial Organs, 25(3):172-179, Blackwell Science, Inc.	
		J. AIGNER, J. TEGELER, P. HUTZLER, D. CAMPOCCIA, A. PAVESIO, C. HAMMER, E. KASTENBAUER, A. NAUMANN, Cartilage tissue engineering with novel nonwoven structured biomaterial based on hyaluronic acid benzyl ester, J. Biomed. Mater. Res. 42, 172-181 (1998)	
		PAOLA BRUN, GIOVANNI ABATANGELO, MARCO RADICE, VALENTINA ZACCHI, DIEGO GUIDOLIN, DANIELA DAGA GORDINI, ROBERTA CORTIVO, Chondrocyte aggregation and reorganization into three-dimensional scaffolds, J. Biomed. Mater. Res. 46, 337-346 (1999)	
		LUIS A. SOLCHAGA, JUNG U. YOO, MAGNUS LUNDBERG, JAMES E. DENNIS, BARBARA A. HUIBREGTSE, VICTOR M. GOLDBERG, AND ARNOLD I. CAPLAN, Hyaluronan-based Polymers in the Treatment of Osteochondral Defects, Journal of Orthopaedic Research, 18:773-780 (2000)	

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov), MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to indicate here if English language Translation is attached.

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STATEMENT BY APPLICANT**

(use as many sheets as necessary)

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		US			
		US			
		US			
		US			
		US			

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		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)			
		JP	6-72893	A	03-15-1994	SEIKAGAKU KOGYO CO LTD	ABSTRACT
		JP	5-236951	A	09-17-1993	SEIKAGAKU KOGYO CO LTD	ABSTRACT
		JP	2000-212204	A	08-02-2000	TOKYO IKA SHIKA UNIV	ABSTRACT
		JP	9-59303	A	03-04-1997	SHISEIDO CO. LTD.	ABSTRACT
		JP	2002-529550	A	09-10-2002	AGUISITIO S.P.A.	Corresponding Application WO 00/27887 cited below
		WO	00/27887	A2	05-18-2000	AQUISITIO S.P.A.	
		JP	11-509256	A	08-17-1999	AGERUP	Corresponding Application WO 97/04012 cited below
		WO	97/04012	A1	02-06-1997	AGERUP	

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation <sup>6</sup>

Examiner Signature

Date Considered

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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov), MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to indicate here if English language Translation is attached.